P21705.A10

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) : You-Jin EUN et al.

Group Art Unit: 2132

Appln. No. : 09/926,594

Examiner: M. DINH

Filed : November 23, 2001

Confirmation No. : 4083

For : METHOD AND APPARATUS FOR PROTECTING FILE SYSTEM BASED ON DIGITAL SIGNATURE CERTIFICATE

CORRECTED CORRECTION OF RECORD

Commissioner for Patents
U.S. Patent and Trademark Office
Customer Service Window, Mail Stop Issue Fee
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir:

In the Completion of Record that was filed on August 30, 2007 in the above-captioned application, among the documents brought to the Examiner's attention was the following document:

(1) The English translation of the Preliminary Office Action issued on February 7, 2006 by the Japanese Patent Office in connection with counterpart Japanese Patent Application No. 2001-576611.

However, the above translation was incorrect. Accordingly, applicants submit herewith the corrected English translation regarding the above document (1). In this regard, the List of Cited References at page 7 of the English translation has been corrected to show that listed document 4 was authored by Tatsuaki Okamoto. However, the correct translation of the title of this document is submitted to be "Series/Study of Information Science", and not the title

incorrectly listed on the Supplemental Information Disclosure Statement filed earlier on June 18, 2007.

Inasmuch as this corrected translation is being submitted at the request of the Examiner and to complete the record in accordance with MPEP 609.04(a)(III), Applicants do not believe that any fees are necessary. However, should any fees be necessary, Applicants hereby authorize the charging of any required fees to Deposit Account No. 19-0089.

Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,
You-Jin EUN et al.

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September 11, 2007
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Notice of Preliminary Office Action

Patent Application No.	2001-576611
Response Due Date:	February 3, 2006
Patent Office Examiner:	Heiben Sei
Patent Attorney(s) for Applicant(s):	Kigoku Bimei et al.
Applied Article(s):	Text of Article 29, Article 29(2), Article 36

The subject application is rejected on the grounds set forth below. If the applicant has any opinion in this regard, the applicant may file an argument within three (3) months from the date when this Notice is delivered.

GROUNDS

A. The invention defined in the claims of the subject application below could have easily been conceived by a person having ordinary skill in the art to which the invention pertains, prior to the filing of the subject application, in view of the invention disclosed in the publication below, which was distributed in Japan or foreign countries prior to the filing of the subject application, or the invention available to the public through an electrical communication circuit line. Accordingly, the claimed invention cannot be patented pursuant to Article 29(2) of the Patent Act.

Below (For Cited References, please refer to the list of Cited References.)

[Claim 1] Cited References 1 and 2

Please refer to the following recitations in Cited Reference 1. (Note: The portions of Cited Reference 1 indicated in this notice are based on the publication of Japanese Patent Announcement No. 2002-523816.)

a. A security server 101 certifies user's log-on information on user's public key certificate. The user has a non-public key (paragraph Nos. [0031] and [0032], steps 200 to 204 in Fig. 4).

b. An access to a protection resource 102 through a security server 101 is access-controlled based on a specific attribute value, which is in user's public key certificate (paragraph Nos. [0035] and [0036]). Further, a process, such as, a database server, an application server, etc., is provided as an example of a protection resource (paragraph Nos. [0003] and [0010]).

c. The public key certificate contains certifier's public key bit and publisher's digital signature bit (paragraph No. [0024]). (Further, please pay attention to the fact that it is self-evident that a publisher needs to produce publisher's secret key and public key for publisher's digital signature.)

As stated above, Cited Reference 1 discloses the following invention:

"A method of protecting a resource in a system of controlling an access of a user having a secret key to the resource, wherein the method comprises the steps:

authenticating user's identity through certification based on user's public key and electronic signature including publisher's digital signature, where a user intends to access to a protection resource; and

assigning an access right to the protection resource according to the result of identity authentication."

The invention defined in Claim 1 of the subject application is different from the invention disclosed in Cited Reference 1 in that Cited Reference 1 does not disclose steps a) to d), recited in Claim 1 of the subject application (Difference 1), and that Claim 1 of the subject application relates to a method of protecting a file system, while Cited Reference 1 relates to a method of protecting a resource (Difference 2).

Regarding Difference 1

It is clear that publisher's secrete key and public key (corresponding to electronic signature key, recited in Claim 1 of the subject application) and certification should be produced for publisher's digital signature, as disclosed in Cited Reference 1. Further, storing this in a secure region (corresponding to a protection kernel, recited in Claim 1 of the subject application) could have appropriately conceived by one of ordinary skill in the art of the claimed invention.

Further, the user of Cited Reference 1 uses public key certificate. Thus, it is natural to produce user's electronic signature key and user's certification on the premise that the public key certificate is used, as in Claim 1 of the subject application. Finally, it is natural that an access right should be determined in order to perform an access control, as disclosed in Cited Reference 1. Therefore, Difference 1 is not acceptable.

Regarding Difference 2

Adopting a well-known file system as a protection resource of Cited Reference 1 (please refer to the abstract of Cited Reference 2) could have appropriately been conceived by one of ordinary skill in the art of the claimed invention. Further, no specific difficulty is found in performing protection by a security server disclosed in Cited Reference 1 as compared to performing protection in a kernel.

Therefore, the invention defined in Claim 1 of the subject application could have easily been conceived by one of ordinary skill in the art of the claimed invention in view of Cited Reference 1 and the well-known technology (Cited Reference 2).

[Claims 2 to 4] Cited References 1, 2 and 3

Please refer to a registry service and an access control list in Cited Reference 3 (which discloses correction and an access to a security entity by a manager).

The well-known registration and deletion, as disclosed in Cited Reference 1, could have appropriately been conceived by one of ordinary skill in the art of the claimed invention (please refer to Cited Reference 3).

[Claim 5] Cited References 1 and 2

As step 1), it is nothing more than a natural order.

[Claim 6] Cited References 1, 2 and 4

Cited Reference 4 discloses a password type (please refer to 9.1 password type) and certification of the other party by using random number, r and user's public key, as a type using public key encryption / digital signature.

Applying the technology disclosed in Cited Reference 4 to certification in Cited Reference 1 could have appropriately been conceived by one of ordinary skill in the art of the claimed invention. Further, since Cited Reference 1 has publisher's signature (manager's signature in the subject application), one of ordinary skill in the art of the claimed invention could have appropriately confirmed it.

[Claim 7] Cited References 1, 2 and 3

What right is assigned to a user is a simple modification in constitution.

[Claim 8] Cited References 1, 2 and 3

This can be appropriately performed by user's management.

[Claim 9] Cited References 1, 2 and 3

This is nothing more than a normal drafting method of certification.

[Claim10] Cited References 1, 2 and 3

This is nothing more than normal considerations in determining rights.

[Claim11] Cited References 1, 2 and 3

To determine whether a user is a general user or a manager is normally performed.

[Claims 12 and 23] Cited References 1 and 2

Please refer to Claim 1.

[Claims 13, 14, 15, 24, 25, and 26] Cited References 1, 2 and 3

Please refer to Claims 2, 3 and 4.

[Claims 16 and 27] Cited References 1 and 2

Please refer to Claim 5.

[Claims 17 and 28] Cited References 1, 2 and 4

Please refer to Claim 6.

[Claims 18 to 22 and 29 to 33] Cited References 1, 2 and 3

Please refer to Claims 7 to 11.

B. The claims of the subject application does not comply with the requirements of Article 36(6)(ii) of the Patent Act as set forth below.

Below

1. The method recited in Claims 1 to 11 is unclear since the method is interpreted as being operated by a person.
2. What is meant by authenticating the identity through certification based on electronic signature, recited in Claims 1, 12 and 23, is unclear, i.e., appropriate

Japanese translation for this phrase is unclear. Further, the portion in the specification corresponding to this recitation is unclear. (Portions in Fig. 4, 904 and 908, and Fig. 10 corresponding to this recitation are unclear.)

3. The subject of performing step e-2), recited in Claims 6, 7 and 28, is unclear.
4. The relationship between "certification" based on electronic signature in step 3), recited in Claims 1, 12 and 23, and "certification" in steps a) and c) is unclear.
5. Portions in the specification corresponding to Claims 7, 18 and 29 are unclear. (The expression, "f-2," is regarded as a manager.)
6. What is indicated by the limitation, "said file system," recited in Claim 12, is unclear.
7. What is a method of certifying electronic signature, recited in Claim 12, is unclear. Further, the portion in the specification corresponding to this recitation is unclear.
8. What is electronic signature suitable said random number, recited in Claims 17 and 28, is unclear.

The invention defined in the claims of the subject application cannot be patented since it does not meet the requirements of Article 29(1) of the Patent Act as set forth below.

Below

(In case where the subject of performing each step is interpreted as a person) The method defined in Claims 1 to 11 does not fall within an "invention." (Please refer to the Examination Guidelines.) In particular, step d), recited in Claim 1, is interpreted as being performed by a person.

List of Cited References

1. International Publication No. 00/10303 (9. Publication of Japanese Patent Announcement No. 2002-523816)
2. Japanese Patent Publication No. Hei 04-245368
3. Concepts of Distributed Computing Environment, first edition, IBM Japan, Ltd., January 31, 1997, pp 63 to 68 (CSDB: Manual 2002-03837-001)
4. Tatsuaki Okamoto, Series/Study of Information Science Modern Encryption, first edition, Japan, Industry Publishing Co., June 30, 1997, pp 151 to 156 (CSDB: Independent Volume 2000-00122-001)

Record of research results, such as prior art references (which does not result in the grounds of the rejection)

Field Researched IPC G06F21/24

Prior Art References, etc.

5. Konda Bikou, Regarding Security in a Distributed System, Technology Research Report by the Conference of Electronic Information Communication, Japan, Corporation Aggregate Conference of Electronic Information Communication, December 31, 1996, Vol. 96 No. 406, pp 7 to 12, (CSDB: Domestic Conference Paper 1998-00263-002)

6. Japanese Patent Publication No. Hei 10-135943 (Document relevant to IC card, as disclosed in the Abstract, and smart card, as defined in the subject application)

7. Japanese Patent Publication No. 2000-099477 (paragraph Nos. [0007] to [0011], general technology regarding capability)

8. Japanese Patent Publication No. Hei 01-205344

If you should have any questions in regard to this Notice or want to conduct an interview, please contact me as set forth below:

Heiben Sei, Examination Division 4, Information Process,
of Japanese Patent Office (Information Security)
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